United States Patent

[11] **3,585,747**

[72] Inventor **Clifford E. Erickson**
Louisville, Ky.

[21] Appl. No. **799,655**
[22] Filed **Feb. 17, 1969**
[45] Patented **June 22, 1971**
[73] Assignee General Electric Company

[54] **DISPLAY MEMBER**
4 Claims, 5 Drawing Figs.

[52] **U.S. Cl.** **40/124.1,** 40/125
[51] **Int. Cl.** **G09f 1/100**
[50] **Field of Search** ..... 40/125, 124.1, 142 A, 129 C; 248/475

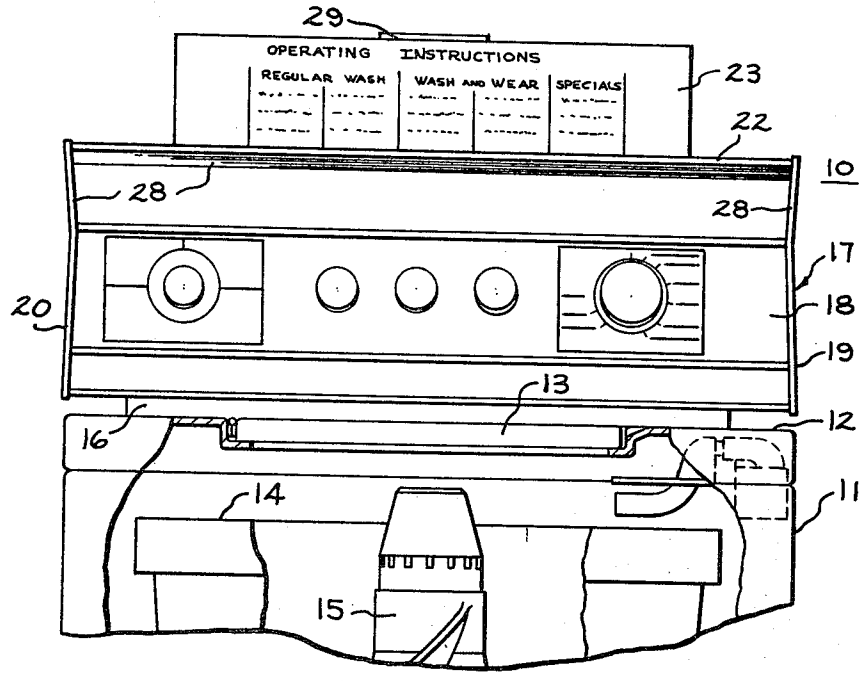
[56] **References Cited**

UNITED STATES PATENTS

2,795,877	6/1957	Falk	40/124.1
2,871,594	2/1959	Halpert	40/129 C
3,186,665	6/1965	Cole et al.	248/475
3,422,556	1/1969	Lyons et al.	40/129 C

Primary Examiner—Robert W. Michell
Assistant Examiner—Wenceslao J. Contreras
Attorneys—James E. Espe, Harry F. Manbeck, Jr., Joseph B. Forman, Oscar B. Waddell and Frank L. Neuhauser

ABSTRACT: A support system is provided to position an operating instruction form adjacent the control panel of an automatic washer or the like. The support system comprises an instruction support member pivotally mounted for movement relative to the control panel, a positioning means secured to the support member for movement in response to movement of the support member, and a magnet secured to the positioning means and adapted to slide along the rear and top walls of the control panel whereby attraction therebetween will cause the instruction support member to be retained in the selected position.



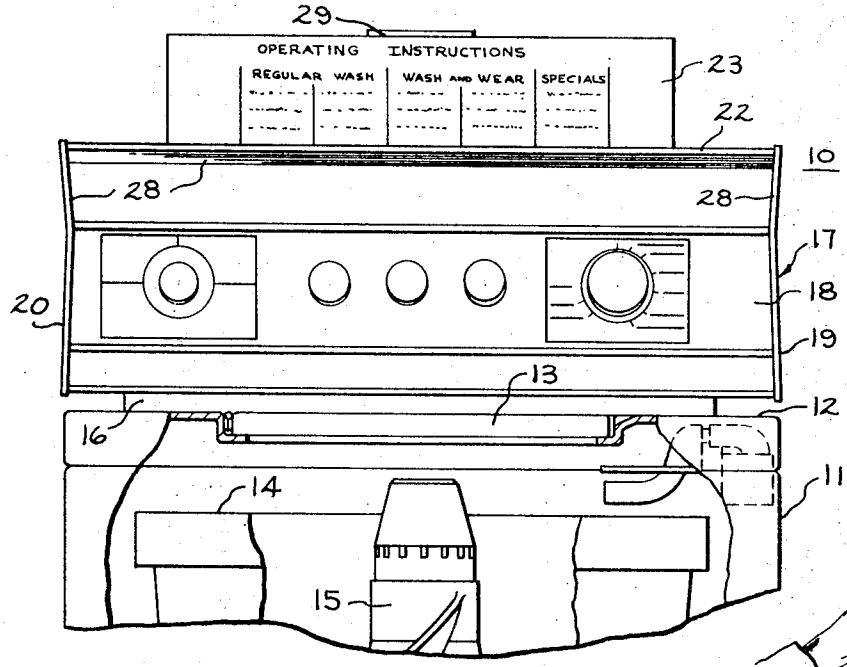


FIG. 1

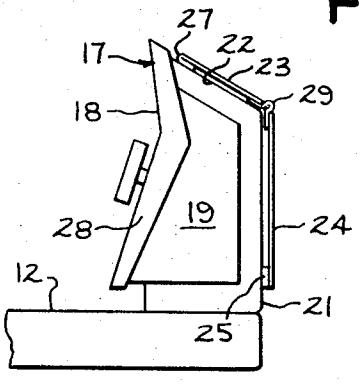


FIG. 3

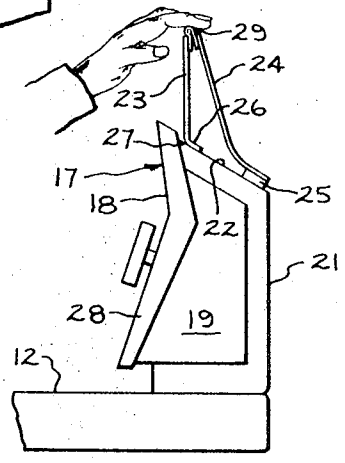


FIG. 5

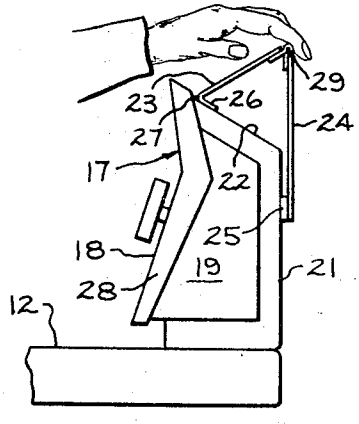


FIG. 4

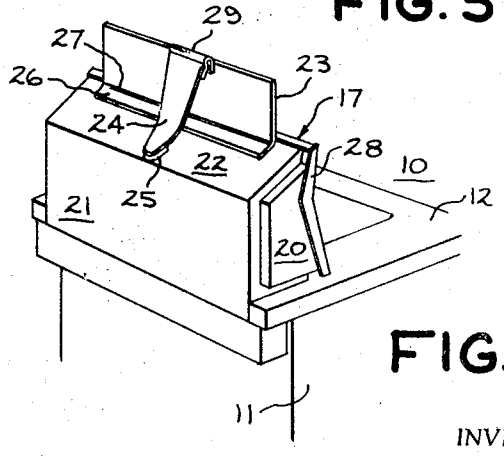


FIG. 2

INVENTOR.
CLIFFORD E. ERICKSON
BY
James E. Eyre
HIS ATTORNEY

DISPLAY MEMBER

BACKGROUND OF THE INVENTION

This invention relates generally to major applicances having upstanding control panels such as automatic clothes washers and the like, and in particular relates to a support system for an operating instruction form to supplement such instructions as may appear on the front wall of a control panel.

It is desirable, in conjunction with the operation of major appliances such as automatic washers, to provide a posting of such operating instructions as are necessary to supplement today's increasingly complex appliance control panels. Especially in conjunction with the operation of automatic washers is it desirable to provide such a posting of instructions in a position which is readily visible to the operator both before and during the operation of the machine, as the operator may desire to alter the cycle selection at some point during the machines' operation. Conventionally, such operating instructions are posted on the interior of the lid which closes the access opening to the washer. Most automatic clothes washers today include a lid switch which will terminate the operation of the washer should the lid be opened. Furthermore, such machines frequently include a lid lock means to prevent the opening of the lid during spinning of the washing basket. Such lid switch and lock means are desirable from the standpoint of safety, but become an aggravation to the operator who desires to refer to the instructions printed on the lid interior.

It is further desirable that the operating instructions be positioned in close proximity to the control panel, and ideally adjacent thereto for ready reference. Additionally it is desirable for aesthetic reasons to support the operating instructions in such a manner as to permit their removal from sight when reference thereto is not required.

It is therefore an object of my invention to provide an appliance instruction form support which is positioned so as to be visible both before and during the operation of the appliance without causing the appliance cycle to be terminated to view the instructions.

It is a further object to provide such an instruction support as will position the instructions adjacent the control panel.

It is further an object of my invention to provide such an instruction support as will permit removal of the instructions from view during such times as reference thereto is not required.

SUMMARY OF THE INVENTION

Briefly stated, in accordance with one aspect of the present invention, there is provided an appliance instruction form support for use in conjunction with a major appliance having an upstanding control panel including rear and top walls. The support comprises an instruction support member pivotally mounted on the top wall for rotation relative thereto. A positioning means is secured to the support member for movement in response to the pivotal movement of the support member. A magnetic means is associated with the positioning means and the rear and top walls. By this arrangement, the positioning means may be selectively positioned along the rear and top walls to selectively adjust the angular position of the support member.

BRIEF DESCRIPTION OF THE DRAWING

While the specification concludes with claims particularly pointing out and distinctly claiming the subject matter which is regarded as the invention, it is believed the invention will be better understood from the following description of the preferred embodiment taken in conjunction with the accompanying drawing, in which:

FIG. 1 is a fragmentary front elevational view of the upper portion of an automatic washer embodying one form of my invention;

FIG. 2 is a partial rear perspective view of the upper portion of the washer of FIG. 1;

FIG. 3 is a fragmentary side elevational view of the machine with the support of my invention in storage position;

FIG. 4 is a view similar to FIG. 3 with my support partially raised into viewing position; and

FIG. 5 is a view similar to FIG. 3 with my support fully raised into viewing position.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawing, and initially to FIG. 1 thereof, there is illustrated an agitator-type, vertical axis automatic clothes washer 10 having an outer appearance cabinet 11 including a top surface 12 in which an opening 13 is formed to provide access to a clothes receiving basket 14 positioned within cabinet 11. Basket 14 is conventionally rotatably mounted for washing and rinsing clothes therein and for centrifugally extracting liquid therefrom. At the center of basket 14 there is provided an agitator 15 to agitate the washing fluid and thereby effect the desired washing and rinsing action. A cover (not shown) is commonly mounted on cabinet 11 by appropriate hinge means so as to provide access through opening 13 to the basket 14 when in the open position, and to prevent access to the basket 14 when in the closed position.

Secured to the top surface 12 by appropriate means such as pedestal 16 is a control panel assembly 17 which includes the controls conventionally associated with automatic washers for causing the machine to proceed through a variety of cycles which may be selected according to the desires of the operator. It will be understood that a considerable variety of cycles are frequently provided on automatic washing machines to correspond with the washing requirements of different fabrics depending on their thickness, composition, size and other factors. Control panel 17 comprises a front wall 18, sidewalls 19 and 20, rear wall 21, and top wall 22. Rear wall 21 and top wall 22 are composed of a ferrous metallic material or such other alloy as may be attracted readily by a magnet.

As was previously mentioned, it is desirable to provide a posting of the appliance operating instructions at a location adjacent the control panel and in a position which will be readily visible to the operator both before and during the operation of the washer. For this purpose, I provide an instruction support member 23 pivotally mounted adjacent the front edge of top wall 22. A positioning means or relatively flexible prop arm member 24 is pivotally attached to support member 23 at the upper ends of both members for movement in response to the rotation of the instruction support member 23. Magnetic means, comprising a magnet 25 secured to the lower end of member 24, is adapted to selectively position the positioning means or prop arm 24 along rear wall 21 and top wall 22. Member 24 may be made relatively flexible in order that magnet 25 may seat flat against either rear wall 21 or top wall 22.

Support member 23 may be made of a variety of plastic or water resistant materials. In the preferred embodiment of my device, the instruction support has an integral hinged tab portion 26 separated from the main body of member 23 by a flexible hinge line 27. Tab portion 26 is adhesively bonded to top wall 22 in such fashion as to position the lower edge of the instruction display area immediately adjacent the rear edge of bezel strip 28. Such instructions as may be necessary to supplement those that may appear on front wall 18 of control panel 17 may be printed on support member 23 or secured thereto by adhesive in the case of preprinted instruction cards.

Positioning means or member 24 is pivotally secured to the upper or rearmost edge of support member 23 by a hinge 29 which may comprise interleaved apertured portions formed integral with members 23 and 24 through which a wire or pin may be inserted. Magnet 25 may be adhesively or otherwise mechanically secured to the lower end of member 24 and preferably is of the rubber bonded barium ferrite type or the like, so as to not scratch rear or top walls 21 and 22.

The instruction support member 23 may be brought into viewing position from the storage position of FIG. 3 by grasping the hinge 29 with the fingers of one's hand and pulling in an upwardly direction as is shown in FIGS. 4 and 5. Such movement will cause member 23 to rotate about hinge line 27

resulting in an upward movement of pivotally connected member **24** and magnet **25**. Magnet **25** will slide upwardly along rear wall **21** and thence along top wall **22**. Support member **23** will be retained in the selected position by magnet **25** which attracts the metallic rear and top walls **21** and **22**. When the instructions displayed on member **23** are no longer needed, a downward pressure on member **23** or hinge **29** will cause the magnet **25** to slide downwardly along top wall **22** and rear wall **21** whereupon the instruction support member **23** may be returned to the storage position of FIG. **3**. Due to the rearward sloping configuration of top wall **22** and the upwardly extending configuration of bezel strip **28**, the instruction support member **23** will be substantially hidden from view when in the storage position.

It will be obvious that hinged tab portion **26** and hinge **29** may be formed in the manner of other conventional hinge structures and that the materials comprising member **23**, member **24** and magnet **25** may be varied to suit the application. It would further be within the scope of my invention to interchange the attracted and attraction means for causing member **24** to retain its adjusted position, whereby a magnetic surface could be provided along rear and top walls **21** and **22**, and member **24** could be made of magnetically attractive material.

As was previously mentioned, my instruction support system is particularly adapted for use on automatic clothes washers and the like wherein it is desirable to provide a posting of such operating instructions as may be necessary to supplement those appearing on the front wall of the control panel at a position adjacent the control panel which is readily accessible to the operator both before and during the operation of the washer. From the foregoing description it should now be apparent that the present invention provides such an instruction display which is supported by a simple and inexpensive means and which is adapted to be lowered substantially out of sight when reference thereto has been completed.

As will be evident from the foregoing description, certain aspects of the invention are not limited to the particular details of construction of the example illustrated, and it is contemplated that other variations, modifications or applications will occur to those skilled in the art. It is therefore intended to cover such variations, modifications and applications as do not depart from the true spirit and scope of the invention.

What I claim and desire to secure by Letters Patent of the United States is:

1. An upstanding control panel comprising:

a front wall;

manually operable control means carried by the front wall;

at least one other wall disposed rearwardly of said front wall and adapted to enclose such portion of said control means as extends rearwardly of said front wall;

a support member pivotally carried by one of said walls for movement between an exposed upstanding position and a retracted position;

positioning means pivotally connected at one end to said support member and having the other end adapted to move along said other wall in response to pivotal movement of said support member; and

magnetic means associated with said other end of said positioning means and said other wall to cause attraction therebetween, whereby when said support member is pivoted to a desired position, it will be held there by the action of said magnetic means.

2. The invention of claim **1** wherein said positioning means comprises a relative flexible member and said magnetic means comprises a magnet secured to said flexible member and adapted to attract said other wall, whereby said positioning means may deflect to enable said magnet to fully engage said other wall.

3. The invention of claim **2** wherein:

said at least one other wall comprises a rear wall and a top wall, said top wall being adapted to extend between the upper edges of said rear wall and said front wall;

said support member is pivotally secured at its bottom edge to the upper surface of said top wall adjacent the juncture of said top wall and said front wall; and

said other end of said positioning means is adapted for movement along said top wall and said rear wall whereby said magnetic means may interact between said positioning means and said top and rear walls.

4. The invention of claim **3** wherein:

said positioning means comprises a depending prop arm pivoted at said one end to the top edge of said support member; and

said support member is of such configuration as will permit said support member and said prop arm to lie flat, respectively, against said top wall and said rear wall of said control panel when said support member is moved to a collapsed position wherein the hinge line between said support member and said prop arm overlies the juncture between said top wall and said rear wall.